

### Summary of Test Results

Reference no. : BC-SUMMARY-2021-28

Customer : Gate Way Valve & Fitting Ltd.

Address : Flat A1, 4/F., Galaxy Factory Building, 25-27 Luk Hop Street, San Po Kong, Kowloon, H. K.

Sample description : Ductile Iron Y-strainer

Nominal pressure (PN) : 16

Manufacturer : AVK Valves (Anhui) Co., Ltd.

Brand name : AVK

Body marking : ← AVK (DN) PN16 GJS

Model no. : 910/21-00X

Origin : PRC

Sample submitted by : Gate Way Valve & Fitting Ltd.

Test standard : WIS 4-52-01 Dec. 1992 : Issue 1 / BS EN 12266-1 : 2012 / BS EN 1563 : 2011 / BS EN 10088-1 : 2014

Test period : 21 January to 08 February 2021

#### A) Sample List

DN (mm)	Specimen no.
65	210118-2731-001
80	210118-2731-002
100	210118-2731-003
150	210118-2731-004
200	210118-2731-005

#### B) Test Item

##### 1) Dimensions Check (In-house method based on Manufacturer requirement)

DN (mm)	Test results	Castco LRN
65	Passed	210118-2731
80	Passed	
100	Passed	
150	Passed	
200	Passed	

##### 2) Coating Thickness Test (WIS 4-52-01 Dec. 1992 : Issue 1 Appendix B)

DN (mm)	Test results	Castco LRN
65	Passed	210118-2731
80	Passed	
100	Passed	
150	Passed	
200	Passed	

#### Remark(s) :

1. This page no. 1A of this summary supersedes page no. 1 of the previous summary of Reference no. : BC-SUMMARY-2021-28 issued on 19 February 2021.

## Summary of Test Results

Reference no. : BC-SUMMARY-2021-28

## B) Test Item (con't)

## 3) Shell Tightness to Internal Pressure (BS EN 12266-1 : 2012 Clause 4)

DN (mm)	Test results	Castco LRN
65	Passed	210118-2731
80	Passed	
100	Passed	
150	Passed	
200	Passed	

## 4) Tensile Test (BS EN 1563 : 2011 Clause 7.2.1.1 Table 1 (Grade EN-GJL-450-10) and Clause 9.1)

DN (mm)	Test results	Castco LRN
65	Passed	210118-2731
100	Passed	
200	Passed	

## 5) Chemical Composition (Screen) (BS EN 10088-1 : 2014 Table 2 Grade 1.4401)

DN (mm)	Test results	Castco LRN
65	Passed	210129-2639
100	Passed	210129-2640
200	Passed	210129-2641

## Remark(s) :

- This page no. 2A of this summary supersedes page no. 2 of the previous summary of Reference no. : BC-SUMMARY-2021-28 issued on 19 February 2021.

 Prepare by : \_\_\_\_\_  
 Date : 09 March 2021

  
**FU HO MAN**  
 Assistant Technical Manager

 Review by : \_\_\_\_\_  
 Date : 09 March 2021

  
**WONG KA MAN**  
 Senior Manager

Test Report  
Strainers - Dimensions  
(In-house method VAL-STRAINER-DIM)

Date of issue : 09 March 2021

Page 1A of 7 page(s)

Castco LRN : 210118-2731

**Details as supplied by customer**

Customer : Gate Way Valve & Fitting Ltd.

Customer's ref. no. : - -

Address : Flat A1, 4/F., Galaxy Factory Building, 25-27 Luk Hop Street, San Po Kong, Kowloon, H. K.

Contract no. : - -

Job title : WSD GA Application for AVK Ductile Iron Y-strainer

Sample description : Ductile Iron Y-strainer

Nominal pressure (PN) : 16

Manufacturer : AVK Valves (Anhui) Co., Ltd.

Brand name : AVK

Body marking : ← AVK (DN) PN16 GJS

Model no. : 910/21 & 910/21-00X

Origin : PRC

Sample submitted by : Gate Way Valve & Fitting Ltd.

**Laboratory test results**

Date of sample received : 04 January 2021

Date of test : 25 January 2021

Specimen no.		210118-2731-001	210118-2731-002	210118-2731-003	210118-2731-004	210118-2731-005
DN (mm)		65	80	100	150	200
Outside diameter of flange (ØD) (mm)	Measured mean value	186	200	221	285	340
	BS EN 1092-2 : 1997 requirement	185	200	220	285	340
Diameter of bolt circle (mm)	Measured mean value	145	160	180	240	295
	BS EN 1092-2 : 1997 requirement	145	160	180	240	295
Diameter of bolt hole & Bolts number (mm & no.)	Measured mean value	19.28 & 4	19.39 & 8	19.29 & 8	23.29 & 8	23.59 & 12
	BS EN 1092-2 : 1997 requirement	19 to 20.5 & 4	19 to 20.5 & 8	19 to 20.5 & 8	23 to 24.5 & 8	23 to 24.5 & 12
Flange thickness (L5) (mm)	Measured mean value	22.54	21.32	21.60	22.18	23.85
	BS EN 1092-2 : 1997 requirement	16 to 23	16 to 23	16 to 23	16 to 23	17 to 24

Remark(s) :

- This page no. 1A of this test report supersedes page no. 1 of the previous test report of Castco LRN : 210118-2731 issued on 19 February 2021 with amendment : "910-21-0110 & 910-21-0311" in "Model no." was changed as "910/21 & 910/21-00X" due to customer request.

Test Report  
Strainers - Dimensions  
(In-house method VAL-STRAINER-DIM)

Date of issue : 09 March 2021

Page 2A of 7 page(s)

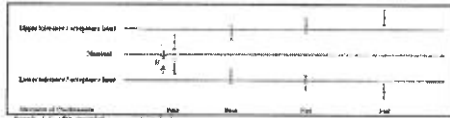
Castco LRN : 210118-2731

**Laboratory test results (con't)**

Specimen no.		210118-2731-001	210118-2731-002	210118-2731-003	210118-2731-004	210118-2731-005
DN (mm)		65	80	100	150	200
L (mm)	Measured mean value	240	285	304	404	522
	Manufacturer requirement	241	283	305	403	521
H (mm)	Measured mean value	160	192	235	310	402
	Manufacturer requirement	161	191	234	310	402

Remark(s) :

1. Test results relate only to the specimen tested.
2. Test results of sample comply with the requirement of BS EN 1092-2 : 1997 Table 9 (this specification is not covered by the laboratory's HOKLAS accreditation).
3. The acceptance limit is the same as the tolerance limit (simple acceptance, see Figure A). Only test results out of the tolerance/acceptance limit will be concluded as out-of-tolerance.

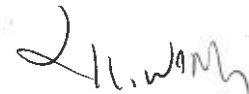


4. This page no. 2A of this test report supersedes page no. 2 of the previous test report of Castco LRN : 210118-2731 issued on 19 February 2021 with amendment : "910-21-0110 & 910-21-0311" in "Model no." was changed as "910/21 & 910/21-00X" in Page 1 due to customer request.

Checked by : \_\_\_\_\_

 **FU HO MAN**  
Assistant Technical Manager

Approved Signatory : \_\_\_\_\_

 **WONG KA MAN**  
Senior Manager

## Test Report

## Valves - Coating Thickness Measurement

(Water Industry Specification 4-52-01 Dec. 1992 : Issue 1 Appendix B in conjunction with the following specification(s):  
Water Industry Specification 4-52-01 Dec. 1992 : Issue 1 Clause 12.7.1)

Date of issue : 09 March 2021

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Castco LRN : 210118-2731

Details as supplied by customer

Customer : Gate Way Valve &amp; Fitting Ltd.

Customer's ref. no. : - -

Address : Flat A1, 4/F., Galaxy Factory Building, 25-27 Luk Hop Street, San Po Kong, Kowloon, H. K. Contract no. : - -

Job title : WSD GA Application for AVK Ductile Iron Y-strainer

Sample description : Ductile Iron Y-strainer

Nominal pressure (PN) : 16

Manufacturer : AVK Valves (Anhui) Co., Ltd.

Brand name : AVK

Body marking : ← AVK (DN) PN16 GJS

Model no. : 910/21 &amp; 910/21-00X

Origin : PRC

Sample submitted by : Gate Way Valve &amp; Fitting Ltd.

Laboratory test results

Date of sample received : 04 January 2021

Date of test : 25 January 2021

Specimen no.	210118-2731-001	210118-2731-002	210118-2731-003	210118-2731-004	210118-2731-005
DN (mm)	65	80	100	150	200
Ambient temperature (°C)	24.0	24.0	24.0	24.0	24.0
Measured value of coating thickness at external surface (µm)	1	592	376	414	473
	2	569	346	448	477
	3	597	366	433	479
	4	585	377	426	479
	5	569	332	440	481
Measured value of coating thickness at internal surface (µm)	6	529	395	515	531
	7	481	472	468	536
	8	511	490	434	560
	9	554	428	406	522
	10	466	596	411	492
	11	611	416	410	516
	12	512	465	416	454
	13	518	397	472	454
	14	433	439	549	457
	15	636	566	408	442
Mean	544.2	430.7	443.3	490.2	436.3
Minimum coating thickness (µm)	433	332	406	442	384
Maximum coating thickness (µm)	636	596	549	560	517
Standard deviation (µm)	57.6	76.4	42.0	35.0	35.8
Manufacturer requirement (µm)	Minimum coating thickness	min. 250			
	Maximum coating thickness	max. 2000			

## Remark(s) :

- Test results relate only to the specimen tested.
- This page no. 3A of this test report supersedes page no. 3 of the previous test report of Castco LRN : 210118-2731 issued on 19 February 2021 with amendment : "910-21-0110 & 910-21-0311" in "Model no." was changed as "910/21 & 910/21-00X" due to customer request.

Checked by :  **FU HO MAN**  
Assistant Technical ManagerApproved Signatory :  **WONG KA MAN**  
Senior Manager

Form no. : BC\_VALVES\_CT\_WIS 4-52-01\_T\_dd\_22/04/2020

**Test Report**  
**Metallic Valves - Shell and Seat Tightness**  
**(BS EN 12266-1 : 2012 Annex A3 and A4)**

Date of issue : 09 March 2021

Page 4A of 7 page(s)

Castco LRN : 210118-2731

**Details as supplied by customer**

Customer : Gate Way Valve &amp; Fitting Ltd.

Customer's ref. no. : - -

Address : Flat A1, 4/F., Galaxy Factory Building, 25-27 Luk Hop Street, San Po Kong, Kowloon, H. K.

Contract no. : - -

Job title : WSD GA Application for AVK Ductile Iron Y-strainer

Sample description : Ductile Iron Y-strainer

Nominal pressure (PN) : 16

Manufacturer : AVK Valves (Anhui) Co., Ltd.

Brand name : AVK

Body marking : ← AVK (DN) PN16 GJS

Model no. : 910/21 &amp; 910/21-00X

Origin : PRC

Sample submitted by : Gate Way Valve &amp; Fitting Ltd.

**Laboratory test results**

Date of sample received : 04 January 2021

Date of test : 25 to 27 January 2021

**A) Shell Tightness**

Specimen no.	210118-2731-001	210118-2731-002	210118-2731-003	210118-2731-004	210118-2731-005
DN (mm)	65	80	100	150	200
Water temperature (°C)	24.5	24.5	24.5	24.5	24.5
Apply pressure (bar)	24	24	24	24	24
Test duration (s)	60	60	60	60	120
Visually detectable leakage	No	No	No	No	No
Requirement	Visually detectable leakage is not permitted				

**Remark(s) :**


1. Test results relate only to the specimen tested.
2. Test results of sample comply with the requirement of BS EN 12266-1 : 2012 Clause 4 (this specification is not covered by the laboratory's HOKLAS accreditation).
3. Effect of measurement uncertainty has not been taken into account.
4. This page no. 4A of this test report supersedes page no. 4 of the previous test report of Castco LRN : 210118-2731 issued on 19 February 2021 with amendment : "910-21-0110 & 910-21-0311" in "Model no." was changed as "910/21 & 910/21-00X" in Page 1 due to customer request.

Checked by :



**FU HO MAN**  
Assistant Technical Manager

Approved Signatory :



**WONG KA MAN**  
Senior Manager

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Website: www.castco.com.hk

Test Report  
Metallic Materials - Tensile Test of Metallic Materials  
(BS EN ISO 6892-1 : 2009)

Date of issue : 09 March 2021

Page 5A of 7 page(s)

Castco LRN : 210118-2731

Details as supplied by customer

Customer : Gate Way Valve & Fitting Ltd. Customer's ref. no. : - -  
Address : Flat A1, 4/F., Galaxy Factory Building, 25-27 Luk Hop Street, San Po Kong, Kowloon, H. K. Contract no. : - -  
Job title : WSD GA Application for AVK Ductile Iron Y-strainer  
Sample description : Ductile Iron Y-strainer  
Nominal pressure (PN) : 16  
Manufacturer : AVK Valves (Anhui) Co., Ltd.  
Brand name : AVK  
Body marking : ← AVK (DN) PN16 GJS  
Model no. : 910/21 & 910/21-00X  
Origin : PRC  
Sample submitted by : Gate Way Valve & Fitting Ltd.  
Acceptance standard : BS EN 1563 : 2011 Clause 7.2.1.1 Table 1 (Grade EN-GJL-450-10) and Clause 9.1

Laboratory test results

Date of sample received : 04 January 2021

Date of test : 21 January 2021

Tensile Test

Specimen no.	DN (mm)	Type & Prepar'n	Specimen length (mm)	Area (mm <sup>2</sup> )	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Position of fracture	Remark
210118-2731-001	65	A, M	182	155.5	340	482	13.4	--	--
210118-2731-003	100	A, M	180	156.4	342	499	12.6	--	--
210118-2731-005	200	A, M	180	154.2	354	520	17.1	--	--

Remark(s) :

1. A - Proportional; B - Non - proportional; M - Machined; N - Unmachined;  
+ - This measurement is 'invalid' which relates to the position of fracture only.
2. The yield strength is determined at 0.2% proof strength.
3. Test results relate only to the specimen tested.
4. Test results of sample comply with the requirement of BS EN 1563 : 2011 Table 1 (this specification is not covered by the laboratory's HOKLAS accreditation).
5. The requirement of BS EN 1563 : 2011 : 0.2% proof strength = min. 310MPa; Tensile strength = min. 450MPa; Elongation = min. 10%.
6. The acceptance limit is the same as the tolerance limit (simple acceptance, see Figure A). Only test results out of the tolerance/acceptance limit will be concluded as out-of-tolerance.

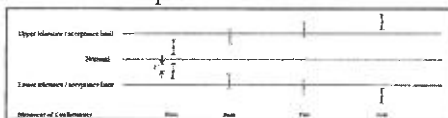


Figure A - Graphical representation of a binary judgement - Simple acceptance

7. This page no. 5A of this test report supersedes page no. 5 of the previous test report of Castco LRN : 210118-2731 issued on 19 February 2021 with amendment : "910-21-0110 & 910-21-0311" in "Model no." was changed as "910/21 & 910/21-00X" in Page 1 due to customer request.

Checked by :  **FU HO MAN**  
Assistant Technical Manager

Approved Signatory :  **WONG KA MAN**  
Senior Manager

Form no. : ST 6892\_T1(for BC)\_dd\_02/01/2020

**Test Report  
Chemical Analysis of Steel**

Date of issue: 09-03-2021

Specimen No.: CHEM-210129-2639-001

Page 1A of 3

Castco LRN: 210129-2639

**Details as supplied by customer**

Name of Customer : Gate Way Valve & Fitting Limited  
Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong  
Job Title : WSD GA application for AVK Ductile Iron Y-Strainer  
Contract No. : --  
Customer's Ref. No. : --

**Sample details as supplied by customer**

Date Sampled : --  
Date of Sample Received : 29-01-2021  
Test Period : 05-02-2021 to 08-02-2021  
Sample Description : DN65 Ductile Iron Y-Strainer (Screen)  
Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401  
Specimen No. : 210118-2731-001  
Sample Identification No. : -- / Model No. : 910/21-00X / Origin : PRC  
Manufacturer : AVK Valves (Anhui) Co., Ltd. / Brand name: AVK

**Test Method(s):-**

- 1) BS EN ISO 15350 : 2010
- 2) ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

**Remark:**

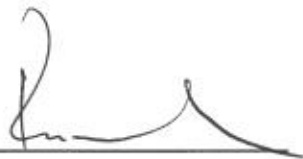
- I. Test results only relate to the specimen tested.
- II. This page no. 1A of this test report supersedes page no. 1 of the previous test report of Castco LRN 210129-2639 issued on 17-02-2021.
- III. Refer to the previous test report of Castco LRN 210129-2639, the sample details were revised in this issue due to the supplementary information of the client.

Checked by :

  
Lau Hiu Yat

Assistant Technical Manager

Approved Signatory :

  
Cheng Chi Fai

Senior Manager



## Appendix A

## Summary of Chemical Analysis of Steel

Date of issue: 09-03-2021

Specimen No.: CHEM-210129-2639-001

Page 3A of 3

Castco LRN: 210129-2639

Name of Customer: Gate Way Valve &amp; Fitting Limited

Job Title: WSD GA application for AVK Ductile Iron Y-Strainer

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 29-01-2021

Testing Period: 05-02-2021 to 08-02-2021

Castco LRN:	210129-2639				
Sample Description :	DN65 Ductile Iron Y-Strainer (Screen)				
Sample Identification No.:	-- / Model No. : 910/21-00X / Origin : PRC				
Specimen No. :	210118-2731-001				
Manufacturer :	AVK Valves (Anhui) Co., Ltd. / Brand name: AVK				
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401			Test Results	Within / Exceed limit	
Carbon	C	0.07 max.	%	0.020	Within limit
Sulfur	S	0.015 max.	%	0.0047	Within limit
Chromium	Cr	16.5 to 18.5	%	17.20	Within limit
Manganese	Mn	2.00 max.	%	1.41	Within limit
Molybdenum	Mo	2.00 to 2.50	%	2.03	Within limit
Nickel	Ni	10.0 to 13.0	%	10.05	Within limit
Phosphorus	P	0.045 max.	%	0.021	Within limit
Silicon	Si	1.00 max.	%	0.429	Within limit
Nitrogen	N	0.11 max.	%	0.012	Within limit

**Remark(s):**

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401.
- III. This page no. 1A of this Appendix A supersedes page no. 1 of the previous Appendix A of Castco LRN 210129-2639 issued on 17-02-2021.
- IV. Refer to the previous Appendix A of Castco LRN 210129-2639, the sample details were revised in this issue due to the supplementary information of the client.

**Test Report  
Chemical Analysis of Steel**Date of issue: 09-03-2021  
Page 1A of 3Specimen No.: CHEM-210129-2640-001  
Castco LRN: 210129-2640**Details as supplied by customer**

Name of Customer : Gate Way Valve & Fitting Limited  
Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong  
Job Title : WSD GA application for AVK Ductile Iron Y-Strainer  
Contract No. : --  
Customer's Ref. No. : --

**Sample details as supplied by customer**

Date Sampled : --  
Date of Sample Received : 29-01-2021  
Test Period : 05-02-2021 to 08-02-2021  
Sample Description : DN100 Ductile Iron Y-Strainer (Screen)  
Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401  
Specimen No. : 210118-2731-003  
Sample Identification No. : -- / Model No. : 910/21-00X / Origin : PRC  
Manufacturer : AVK Valves (Anhui) Co., Ltd. / Brand name: AVK

**Test Method(s):-**

- 1) BS EN ISO 15350 : 2010
- 2) ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

**Remark:**

- I. Test results only relate to the specimen tested.
- II. This page no. 1A of this test report supersedes page no. 1 of the previous test report of Castco LRN 210129-2640 issued on 17-02-2021.
- III. Refer to the previous test report of Castco LRN 210129-2640, the sample details were revised in this issue due to the supplementary information of the client.

Checked by :

  
Lau Hiu Yat  
Assistant Technical Manager

Approved Signatory :

  
Cheng Chi Fai  
Senior Manager

## Appendix A

## Summary of Chemical Analysis of Steel

Date of issue: 09-03-2021

Specimen No.: CHEM-210129-2640-001

Page 3A of 3

Castco LRN: 210129-2640

Name of Customer: Gate Way Valve & Fitting Limited  
 Job Title: WSD GA application for AVK Ductile Iron Y-Strainer  
 Contract No.: --  
 Customer's Ref. No.: --  
 Date of Received by Lab.: 29-01-2021

Testing Period: 05-02-2021 to 08-02-2021

Castco LRN:	210129-2640				
Sample Description :	DN100 Ductile Iron Y-Strainer (Screen)				
Sample Identification No.:	-- / Model No. : 910/21-00X / Origin : PRC				
Specimen No. :	210118-2731-003				
Manufacturer :	AVK Valves (Anhui) Co., Ltd. / Brand name: AVK				
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401			Test Results	Within / Exceed limit	
Carbon	C	0.07 max.	%	0.022	Within limit
Sulfur	S	0.015 max.	%	<0.0020	Within limit
Chromium	Cr	16.5 to 18.5	%	17.12	Within limit
Manganese	Mn	2.00 max.	%	1.40	Within limit
Molybdenum	Mo	2.00 to 2.50	%	2.01	Within limit
Nickel	Ni	10.0 to 13.0	%	10.02	Within limit
Phosphorus	P	0.045 max.	%	0.021	Within limit
Silicon	Si	1.00 max.	%	0.435	Within limit
Nitrogen	N	0.11 max.	%	0.012	Within limit

**Remark(s):**

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401.
- III. This page no. 1A of this Appendix A supersedes page no. 1 of the previous Appendix A of Castco LRN 210129-2640 issued on 17-02-2021.
- IV. Refer to the previous Appendix A of Castco LRN 210129-2640, the sample details were revised in this issue due to the supplementary information of the client.

**Test Report**  
**Chemical Analysis of Steel**Date of issue: 09-03-2021  
Page 1A of 3Specimen No.: CHEM-210129-2641-001  
Castco LRN: 210129-2641**Details as supplied by customer**

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : WSD GA application for AVK Ductile Iron Y-Strainer

Contract No. : --

Customer's Ref. No. : --

**Sample details as supplied by customer**

Date Sampled : --

Date of Sample Received : 29-01-2021

Test Period : 05-02-2021 to 08-02-2021

Sample Description : DN200 Ductile Iron Y-Strainer (Screen)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401

Specimen No. : 210118-2731-005

Sample Identification No. : -- / Model No. : 910/21-00X / Origin : PRC

Manufacturer : AVK Valves (Anhui) Co., Ltd. / Brand name: AVK


**Test Method(s):-**

- 1) BS EN ISO 15350 : 2010
- 2) ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

**Remark:**

- I. Test results only relate to the specimen tested.
- II. This page no. 1A of this test report supersedes page no. 1 of the previous test report of Castco LRN 210129-2641 issued on 17-02-2021.
- III. Refer to the previous test report of Castco LRN 210129-2641, the sample details were revised in this issue due to the supplementary information of the client.

Checked by : \_\_\_\_\_

  
Lau Hiu Yat  
Assistant Technical Manager

Approved Signatory : \_\_\_\_\_

  
Cheng Chi Fai  
Senior Manager

## Appendix A

## Summary of Chemical Analysis of Steel

Date of issue: 09-03-2021

Specimen No.: CHEM-210129-2641-001

Page 3A of 3

Castco LRN: 210129-2641

Name of Customer: Gate Way Valve & Fitting Limited  
 Job Title: WSD GA application for AVK Ductile Iron Y-Strainer  
 Contract No.: --  
 Customer's Ref. No.: --  
 Date of Received by Lab.: 29-01-2021

Testing Period: 05-02-2021 to 08-02-2021

Castco LRN:	210129-2641				
Sample Description :	DN200 Ductile Iron Y-Strainer (Screen)				
Sample Identification No.:	-- / Model No. : 910/21-00X / Origin : PRC				
Specimen No. :	210118-2731-005				
Manufacturer :	AVK Valves (Anhui) Co., Ltd. / Brand name: AVK				
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401			Test Results	Within / Exceed limit	
Carbon	C	0.07 max.	%	0.022	Within limit
Sulfur	S	0.015 max.	%	0.0041	Within limit
Chromium	Cr	16.5 to 18.5	%	17.13	Within limit
Manganese	Mn	2.00 max.	%	1.41	Within limit
Molybdenum	Mo	2.00 to 2.50	%	2.01	Within limit
Nickel	Ni	10.0 to 13.0	%	10.04	Within limit
Phosphorus	P	0.045 max.	%	0.021	Within limit
Silicon	Si	1.00 max.	%	0.435	Within limit
Nitrogen	N	0.11 max.	%	0.012	Within limit

**Remark(s):**

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401.
- III. This page no. 1A of this Appendix A supersedes page no. 1 of the previous Appendix A of Castco LRN 210129-2641 issued on 17-02-2021.
- IV. Refer to the previous Appendix A of Castco LRN 210129-2641, the sample details were revised in this issue due to the supplementary information of the client.